

AMENDMENTS TO THE CLAIMS

1-19 (Canceled)

20. (Currently Amended) An image processing method implemented by one or more processors, comprising:

detecting using said one or more processors an edge width of an edge portion of input image data;

determining using said one or more processors a localized conversion ratio based on the edge width and a ratio control amount, wherein the localized conversion ratio is localized to each one of at least three segments of said edge width, wherein said at least three segments include a leading edge segment, a control edge segment and a trailing edge segment, in which the ratio control amount is positive in the leading edge segment, positive in the trailing edge segment and negative in the control edge segment of the edge portion such that the total sum of the leading edge segment, control edge segment and trailing edge segment is zero, the localized conversion ratio being generated by the expression: $z = z_0 \cdot x \cdot (1 + z_c)$ where z is the localized conversion ratio, z_0 is a reference conversion amount determined in advance and z_c is the ratio control amount; and

generating an output image by applying the localized conversion ratio to the input image data to convert a number of pixels in the segment of the edge portion.

21. (Previously Presented) The image processing method according to claim 20, said determining step determining a different localized conversion ratio for at least one segment of an edge portion of an image than for another segment of the edge portion.

22. (Previously Presented) The image processing method according to claim 20, said determining step determining a localized conversion ratio that is higher for leading and trailing edge segments than for a non-edge segment.

23. (Previously Presented) The image processing method according to claim 20, said determining step determining a localized conversion ratio that is lower for a central edge segment than for a non-edge segment.

24. (Previously Presented) The image processing method according to claim 20, wherein a total sum of localized conversion ratios for leading, central and trailing edge segments is zero.

25. (Previously Presented) The image processing method according to claim 20, said determining step variably controlling the localized conversion ratio depending upon a control pattern determined on the basis of the edge portion.

26. (Previously Presented) The image processing method according to claim 20, said determining and applying steps determining and applying the localized conversion ratio in a horizontal direction, vertical direction or both horizontal and vertical directions.

27. (Previously Presented) The image processing method according to claim 26, wherein the localized conversion ratio for the horizontal direction is different than the localized conversion ratio for the vertical direction.

28. (Previously Presented) The image processing method according to claim 20, further comprising:

specifying an amplitude of the localized conversion ratio to adjust the edge width of the edge portion to a desired edge width.

29. (Previously Presented) The image processing method according to claim 20, further comprising:

detecting an edge reference position of the edge portion;

said determining step determining the localized conversion ratio based on the edge width and edge reference position.

30. (Previously Presented) The image processing method according to claim 20, further comprising:

variably controlling a generation period of the localized conversion ratio.

31. (Previously Presented) The image processing method according to claim 20, further comprising:

variably controlling a maximum and/or minimum value of the localized conversion ratio.

32. (Previously Presented) The image processing method according to claim 20, further comprising:

variably controlling a maximum value, minimum value, and/or generation period of the localized conversion ratio based on the edge width.

33. (Previously Presented) The image processing method according to claim 20, further comprising:

displaying the output image on a display device.